

NOTES ON THE SPECIES OF CULEX OF THE
BAHAMAS

By HARRISON G. DYAR and FREDERICK KNAB

Dr. Dyar visited the Island of New Providence in the Bahamas for his health early in 1915. A few observations that he was able to make seem worthy of record.

The two species of mosquitoes commonly associated with man in the tropics, *Culex quinquefasciatus* Say and *Aedes calopus* Meigen, were abundant and troublesome. They bred together in artificial receptacles, such as rain-barrels and tubs and other collections of water, but not in any of the cisterns or wells. They were found only in the towns. With them was a psychodid, *Psychoda albipunctata* Will., its black larvæ occurring associated in nearly every culture. Outside of the towns, in holes in coral rock containing water, three species of *Culex* were found breeding:

Culex similis Theobald.

The larvæ occurred in every pool, including wells in rock, drainage ditches from the road, and puddles in mud in a mangrove swamp, all, however, permanent water in an essentially natural condition. Females came to bite in the immediate vicinity of the pools, but were not taken in town. This species and *C. quinquefasciatus* did not occur in the same water in any instance under observation, as has elsewhere been observed to be the case (See Howard, Dyar and Knab, Mosq. No. and Centr. Amer. and W. Ind., iii, p. 342, 1915), nor was the water in any case foul, but frequently perfectly clear and cold. It would appear that *C. similis* prefers such clear natural pools and is only forced into foul water and an association with *C. quinquefasciatus* by scarcity of its preferred breeding places.

Culex aseychæ, new species.

Female. Proboscis moderately long, nearly uniform, brownish black scaled throughout. Palpi short, black scaled. Occiput black, clothed with rather sparse, narrow curved, creamy yellow scales, denser along median line, and two patches of

upright forked black scales; ocular margins and cheeks clothed with broad white scales. Mesonotum dark brown, clothed with rather coarse, narrow curved, shining yellowish brown scales, much paler ones along margins and about antescutellar bare space; bristles rather sparse, long and black. Scutellum clothed with fine pale scales; median lobe with six or seven long brown bristles, the lateral lobes with four bristles. Postnotum luteous brown. Pleuræ pale brownish luteous, with patches of broad white scales. Abdomen depressed, blunt at tip; dorsal vestiture of dull black scales, each segment with a broad, creamy white basal band becoming narrower toward the sides; large triangular white patches laterally at bases of segments, not visible from above; venter entirely soiled white scaled. Wings hyaline, moderately broad; fork of second vein nearly twice as long as its stem; scales along the veins blackish, the outstanding ones linear; third and fifth veins with dense, rather broad, truncate appressed scales which give these veins a distinctly blacker appearance. Halteres pale, with blackened knobs. Legs rather long and slender, black scaled, the tarsi unbanded; front femora with a broad white line along the whole length on outer side. Claws simple. Length: Body about 3 mm., wing 3.3 mm.

Male. Proboscis straight, slightly enlarged toward apex, black scaled. Palpi exceeding the proboscis by nearly the length of the last joint, black scaled; end of long joint and last two joints slightly thickened and bearing many rather long black hairs; last two joints subequal and with some pale scales at base. Antennæ loosely plumose, the shortened joints slender and longer than usual; hairs of whorls blackish. Abdomen long, depressed, rather narrow, slightly broadened beyond middle; dorsal white bands broad, transverse, occupying nearly the basal halves of the segments. Wings narrower than in the female; second vein with the fork and stalk subequal in length. Claws unequal; formula: 1.1-1.1-0.0. Length: Body about 3.5 mm., wing 3 mm.

Type: Cat. No. 19978, U. S. Nat. Mus.

The larvæ occurred rarely in rock pools associated with the

two species here discussed. They were not found in the deep rock pools nor in the mangrove swamp.

The female, unfortunately represented by but a single specimen, presents a characteristic appearance in the abdominal banding, all the bands being nearly equally developed, broad and medianly produced. The peculiar scaling of the wing-veins will facilitate the recognition of this species.

Culex sphinx Howard, Dyar and Knab.

Larva: Head large, broad, rounded; antennæ large and prominent, rather slender, with a long hair-tuft at apical third, the part beyond attenuated and infuscated, the basal two-thirds spinose, three long bristles and a long spine apically; dorsal head-tufts four-haired. Skin of body nearly smooth, on thorax finely spinulose; lateral hairs of abdomen in twos on segments 3 to 6. Lateral comb of eighth segment of many small scales in a large patch. Air-tube rather stout, subfusiform, about six times as long as width at base; pecten of 17 to 20 rather long teeth, occupying basal two-fifths of tube; three pairs of long tufts composed of two or three hairs, the basal one just beyond end of pecten, the intermediate one near middle of tube and out of line. Anal segment slightly longer than broad, ringed by the plate; lateral hair single; ventral brush well developed; and gills four, leaf-like, shorter than the segment, subequal.

The larvæ occur in rock pools associated with the two preceding species. They are very different from those of *Culex territans*, with which this species was identified by the late D. W. Coquillett (see Coffin, in Shattuck, The Bahama Islands, 1905, p. 288). In the present species the breathing tube is rather stout and convex, while in the other it is slender and somewhat concave on the distal half; furthermore, in that species the dorsal head-hairs are normally single or double, while the tracheæ are very slender, these latter being broad in *sphinx*.

Culex bahamensis Dyar and Knab.

This species is known only from the peculiar larvæ. Dr. Dyar was not fortunate enough to rediscover them. The habits

and the exact habitat of the original specimens remain unknown.

Culex species.

Dr. Dyar found some little larvæ allied to *C. reductor* D. and K. and *C. floridanus* D. and K., but was not able to rear them. They occurred in a fresh-water swamp on coral rock.

SYNONYMICAL NOTES ON MUSCOIDEA

By CHARLES H. T. TOWNSEND

The following notes are offered at this time as a matter of record and for the purpose of aiding in the elucidation and synonymy of the various forms.

Parabengalia Roubaud, 1913, Bull. Sc. Fr. and Belg., XLVII, 114 equals *OCHROMYIA* Mcq. (1835). Has same genotype.

Calliphora R. D., 1830, Myod., 433-4 equals *MUSCA* L. (1758). Vide Townsend, Jour. Wash. Acad. Sci., V, 433-4. Genotypes strictly congeneric.

Trichocalliphora Townsend, 1915, Proc. Biol. Soc. Wash., XXVIII, 20 equals *NEOPOLLENIA* Brauer, 1899, Sitz. M.-N. Cl. Akad. Wiss., CVII, 496. Brauer (ibid. 524) confirms Schiner's belief (Novara Dipt. 309) that *Calliphora villosa* R. D., type of *Trichocalliphora*, equals *Musca stygia* Fab., type of *Neopollenia*, recorded from Newfoundland apparently in error for New Holland.

Compsomyia Rdi., 1875, Ann. Mus. Civ. St. Nat. Genova, VIII, 425 equals *CHRYSOMYA* R. D. (1830). Vide Townsend, Jour. Wash. Acad. Sci., V, No. 20. The genotypes are apparently strictly congeneric.

Opsophasisops Townsend, 1915, Proc. Biol. Soc. Wash., XXVIII, 22 equals *PALPOSTOMA* R. D., 1830, Myod. 429. *Myiophasia flava* Coq., 1900, Proc. Linn. Soc. N. S. W. for 1900, 390 equals *PALPOSTOMA TESTACEA* R. D. (l. c.). A most remarkable character is present in this form, being nothing less than a supplementary pair of palpi developed on and articulated with the labella. This character was pointed out by Desvoidy in 1830 (l. c.). It is unique, so far as known.